

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 05FLWW069	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/KR2005/001690	International filing date (day/month/year) 07 JUNE 2005 (07.06.2005)	(Earliest) Priority Date (day/month/year) 24 JUNE 2004 (24.06.2004)
Applicant LG ELECTRONICS, INC. et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (See Box No. II)

3. Unity of invention is lacking (See Box No. III)

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

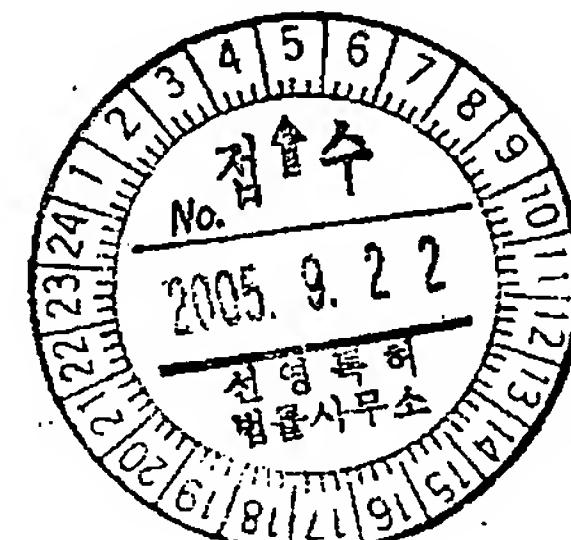
a. the figure of the drawings to be published with the abstract is Figure No. 3

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

b. none of the figure is to be published with the abstract.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2005/001690

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 A47L 15/42

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 A47L, B08B, B02C, F04B, F04D, H92K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Korean Patents and applications for inventions since 1975
 Utility models and applications for Utility Models since 1975
 Japanese Utility Models and applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 eKIPASS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4612947 A (Thomas W. Duncan) 23 September 1986 see figure 13; column 5 line 39-53	1,2,4,5,16-20
Y	US 5624245 A (David M. DeClerck) 29 April 1997 see figure 1; column3 line 19-35	6
A	US 3963046 A (Richard P. Bergeson) 15 June 1976 see figure 3; column6 line17-30	3,7-15
A	US 5909743 A (Edward L. Thies et al.) 8 June 1999 see the whole document	1-20
A	US 6384508 B1 (Elio Marioni) 7 May 2002 see the whole document	1-20
		1,2,4,5

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

12 SEPTEMBER 2005 (12.09.2005)

Date of mailing of the international search report

12 SEPTEMBER 2005 (12.09.2005)

Name and mailing address of the ISA/KR



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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2005/001690

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US04612947A	23.09.1986	None	
US05624245A	29.04.1997	None	
US03963046A	15.06.1976	US3906967A CA1037828A1	23.09.1975 05.09.1978
US05909743A	08.06.1999	None	
US06384508B1	07.05.2002	AT252287E AU199929334A1 AU2933499A1 DE69912051C0 DE69912051T2 EP1372245A1 EP983630A1 EP983630B1 ES2207188T3 ITPD980058A1 US20020122688A1 US2002122688AA US2005147510AA US6384508B1 US6384508BA W09948189A1	15.11.2003 11.10.1999 11.10.1999 20.11.2003 29.07.2004 17.12.2003 08.03.2000 15.10.2003 16.05.2004 20.09.1999 05.09.2002 05.09.2002 07.07.2005 07.05.2002 07.05.2002 23.09.1999